

ORIGINAL ARTICLE

## *Trauma in relation to psychological characteristics in women with eating disorders*

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### BACKGROUND

The aim of the article was to present the results of the author's own study that sought relationships between having experienced psychological trauma and the psychological characteristics of people with eating disorders. The basic research question was the following: To what degree are the traumatic events experienced by females with various types of eating disorders related to these females' psychological characteristics?

### PARTICIPANTS AND PROCEDURE

The sample comprised 120 females with eating disorders: 30 females aged between 20 and 26 diagnosed with bulimia nervosa, 31 females diagnosed with binge-eating disorder and 59 females aged between 20 and 26 diagnosed with anorexia nervosa. The research was carried out in the years 2007-2012 in outpatient clinics treating neuroses and eating disorders and mental health outpatient clinics in Poland. The study employed a clinical and psychometric (i.e., questionnaires for measuring psychological characteristics) approach.

### RESULTS

Statistical analysis confirmed the existence of significant differences between the females with eating disorders who

have experienced relational trauma(s) in their lives (particularly in their childhood and adolescence) and those who did not reveal such experience. The females with anorexia and bulimia who have also experienced psychological, physical or sexual violence revealed a significantly different, higher level of bulimic thinking and tendencies for excessively uncontrolled, impulsive behaviors towards food and nutrition (i.e., vomit-provoking and other forms of body purgation, e.g. using purgative drugs and others) than did females with no relational trauma experience.

### CONCLUSIONS

The frequency of relational trauma occurrence was significantly higher for females with bulimia and bulimic anorexia. For females with restrictive anorexia and binge-eating disorder, no significantly frequent occurrence of trauma was observed.

Diagnosing the occurrence of relational trauma in patients' histories is a key element that should be involved in the process of psychotherapy for people with eating disorders.

### KEY WORDS

trauma; eating disorders

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## BACKGROUND

Seeking relationships between the traumas experienced and psychological characteristics of women with eating disorders does not constitute a domain that has been widely researched in Poland, even though this issue is salient for diagnosing and treating these disorders. The basic aim of the present study is to examine the mutual relationships between psychological trauma experience in females who suffer from various types of eating disorders and the psychological characteristics that the literature indicates to be dominant in the psychological portrayal of females with eating disorders. Another study aim was to verify whether and to what degree the medical diagnosis of anorexia, bulimia or binge-eating disorder correlates with the frequency of psychological trauma occurrence.

Why was this issue chosen?

Firstly, the mentioned research area has been explored empirically to a very small degree, especially in the Polish population, even though it seems to be an interesting topic to explore scientifically.

Secondly, the research area possesses significant applicational importance for seeking empirically verified and psychologically salient risk factors for developing eating disorders. Revealing the magnitude of the relationships between the experienced traumas and the psychological characteristics of people with eating disorders may constitute a significant extension to the source material that is vital for diagnosing and treating this group of patients.

Thirdly, eating disorders (i.e., anorexia, bulimia and others) are identified as ones in which patients present various types of personality structure disorders and psychological characteristics. A common ground for all the mentioned disorders is always body image disorders (negative emotions that annihilate the body, thinking or restrictive, compulsive behaviors towards the body). The research area of psychological trauma in relation to body image disorders is an issue explored increasingly often in scientific research, yet poorly explored with regard to the group of Polish people with eating disorders.

The introduction begins by providing the basic theoretical theses that justify defining the “psychological characteristics” variable and choosing the relationship between traumas and psychological traits in eating disorders as the research area explored in the study. Then basic theses of the theories that justify defining empirically the variable of “traumas” will be presented.

The issue of psychological characteristics and personality traits in people with eating disorders has attracted significantly greater attention among researchers worldwide in the past years. On the other hand, attachment and bond theories point to

psychological trauma(s) as a predictor of personality disorders (Bateman & Fonagy, 2010; Józefik, 2008). Similarly, the contemporary mentalization theory explains the origin mechanism of shortcomings with regard to mentalization ability in concert with the attachment theory as a source of personality.

Contemporary literature indicates that having experienced psychological trauma (particularly in childhood) is a salient factor that influences shaping one’s corporeality as well as personality traits and structure (Klatkiewicz, 2011; Skrzypska & Suchańska, 2011; Sakson-Obada, 2009a, 2009b; Izydorczyk, 2011, 2013a, 2013b, 2014; Jakubczyk, Żechowski, & Namysłowska, 2003).

Examples of foreign studies on personality traits and/or structure in patients with eating disorders (published prior to the year 2000) include those conducted by Strober (1981), Cloninger, Svarkic, and Przybeck (1993), Ranson, Welzin, Rao, and Matsunaga (1999), Fassino and colleagues (2002) and Grilo and Masheb (2002), Grilo et al. (2003) and others (Herzog & Keller, 1992, 2003).

Numerous studies carried out on samples of people with eating disorders that attempt to verify mutual relationships between having experience trauma and developing symptoms of eating disorders can be found in foreign literature also post 2010 (Franzoni et al., 2013; Tasca et al., 2013; Collins, Fischer, Stojek, & Becker, 2014; Litwack, Mitchell, Sloan, Reardon, & Miller, 2014; McCormack, Lewis, & Wells, 2014; Hewett & Loma, 2015; Racine & Wildes, 2015; Madowitz, Matheson, & Liang, 2015; Moulton, Power, Swanson, & Day, 2015; Tahilani, 2015; Caslini et al., 2016).

However, the mutual relationships between traumatic events and eating disorders are not frequently explored in Polish research efforts. Although results of research on the influence of having experienced violence (particularly sexual) on psychological functioning and body self-image can be found in the literature, these studies are few and were carried out on narrow samples (Sakson-Obada, 2008, 2009a, 2009b; Skrzypska & Suchańska, 2011). Polish studies that attempt to verify empirically the strength of relationships between having experienced psychological trauma and eating disorders are even less frequent (Izydorczyk, 2014). The presented issues inspired me to carry out the present study. The study aimed to measure the strength of the relationships between broadly defined traumatic events and the specifics of the psychological (personality) characteristics in women who experience eating disorders (anorexia, bulimia and binge eating disorder).

The literature reveals that psychological profiles of people with eating disorders may be very diverse, which possibly stems from varying personality structures in people with anorexia, bulimia or binge eating disorder. However, in spite of the existing differences between individuals, the research

results allow the identification of several psychological characteristics that account for the specifics of this group. The most commonly identified ones are dissatisfaction with one's body, bulimic thought patterns, deficits in interoceptive awareness, perfectionism, feelings of self-worthlessness, wariness and lack of confidence within interpersonal relationships, and fear of maturing and gaining weight (Garner, 2004; Mikołajczyk & Samochowiec, 2004a, 2004b).

Based on contemporary literature and research results, it can be assumed that the intensity of specific psychological characteristics and experiencing one's own body will vary (i.e., represent a distinctive intensity) in the patients who were diagnosed with anorexia, bulimia and binge-eating disorders whose levels of personality structure organization vary. This assumption is in line with the approach to conceptualizing relationships between the level of personality structure development and the nature of the developed psychological disorders' psychopathology that is commonly accepted and presented in psychodynamic literature. Object relationship theories such as Kernberg's theorization may be mentioned as an example of conceptualizations that point out the mentioned relationships as well as criteria for assessing them (Clarkin, Fonagy, & Gabbard, 2013; Gabbard, 2009).

The ICD-10 and DSM-IV (as well as DSM-5) medical classifications identify anorexia, bulimia and binge-eating disorder (BED) as the main types of eating disorders. The subject literature highlights the dynamic and multiagent etiology of eating disorders (Button & Aldridge, 2007). This group of diseases is often found to have multiple determinants; research results often indicate the significance of socio-cultural, family, individual and biological factors (Pinheiro et al., 2010; Lilienfeld et al., 1998).

The literature on the topics of anorexia and bulimia frequently points to risk factors for developing these disorders; the significance of the separation-individuation process in disorders of this type is often asserted. Similar determinants can be found for BED. The risk factors for developing the BED syndrome that have been identified include biological, socio-cultural and, again, psychological factors. A significant role is attributed to the factors that indirectly stimulate developing the compulsive eating syndrome itself as well as ones that directly stimulate eating binges. Among the factors that are often postulated to indirectly foster the development of BED are the following: early childhood obesity, excessively demanding parents, substance abuse and mood disorder on behalf of the parent(s), early separation from parents and body dissatisfaction; Striegel-Moore et al., 2005; Wardle, Waller, & Rapoport, 2001). The postulated factors that directly boost eating binges include disordered hunger and satiety sensitivity, disordered eating control and mood disorders (Greeno, Wing, & Shiffman, 2000). To sum

up the abovementioned data, the following potential risk factors for developing eating disorders are worth considering: broadly defined emotional deficits stemming from parents in childhood, early separation from parents and body dissatisfaction. Developmental psychology points to the importance of the abovementioned risk factors in children and adolescents' psychological development. During the course of the development of adolescents (who frequently suffer from eating disorders), it is important for them to, among other things, solve the separation-individuation process properly. Owing to this, later on they are able to construct a multi-aspect identity of an adult. Developmental difficulties during the separation-individuation process are a common factor identified within adumbrations on the psychological determinants of eating disorders (Józefik, 2006, 2008).

The specifics of the separation-individuation process, in turn, may be negatively influenced by childhood traumas experienced within the relationships with parents or caretakers. The mentioned traumas can be defined as so-called relational traumas. They are associated with experiencing chronic emotion deficits, abandonment and violence from their close ones and caretakers. This type of trauma is clearly an attack on the shaping emotional bond between the child and their caretaker.

A special place in the theoretical background of this issue is occupied by bond theories, namely, object-relationship (Glickauf-Hughes & Wells, 1997) and attachment theories (Bowlby, 1982, 1988; Józefik, 2008; Józefik, Iniewicz, & Ulańska, 2010). These theories draw on the psychoanalytic/psychodynamic paradigm and the feminist-psychodynamic thinking about sources of the mentioned disorders. On the other hand, the theories that seek confirmation for the significance of disordered bonds between the people with disorders (particularly in childhood) and their caretakers in the case of anorexia and bulimia draw on the family system paradigm (Józefik, 2008).

Attachment theories highlight the significance of internalizing repetitive interactions with a caretaker; these interactions influence the child's pattern of internal structures for viewing itself and the world (Bowlby, 1982, 1988). Inability to form emotional bonds between the child and the caretaker significantly disorganizes the construal of relationships with other people in the child's further everyday life and fosters wariness and insecurity within its psychosocial functioning later on, as an adult.

In spite of the existing differences in research results on the etiopathogenesis of eating disorders and the role of psychological factors, it is worth highlighting the significance of various aspects of attachment and difficulties in forming bonds in people with this type of disorder. The literature within the psychoanalytic and system paradigm points to specific perceptions of the relationships with both mothers

and fathers in people who suffer from anorexia and bulimia (Józefik, 2008).

In light of the attachment theory, the perceptions of people with eating disorders are based on an early-childhood relationship pattern that fosters the formation of an anxious or anxious/avoidant pattern of attachment and, thus, a pattern of relationships with others that is based on distrust and insecurity. It is worth noting the significance of parents' and caretakers' roles in the process of forming the pattern for emotional relationships with others in people with eating disorders (Józefik, 2008). What appears to be vital for the issue analyzed within this work is the existence of research results that indicate a link between disordered bonds and dissatisfaction with the looks of one's body (Józefik, 2008). In my own research, the occurrence of distrust and insecurity in forming interpersonal relationships as well as difficulties with forming bonds with others was found in a sample of 121 women with eating disorders, particularly anorexia and bulimia (Izydorczyk, 2011, 2013a, 2013b, 2014).

When analyzing results of research on the difficulties people with eating disorders have with building emotional relations with others, and having included the prevalence of insecurity and distrust in this pattern, one may note a congruence between these relationship disorders and the system approach. From the system standpoint, the conceptualization of the pathogenesis of eating disorders involves a relationship between developing these disorders and the family patterns that hinder attaining autonomy and communicating one's needs and feelings in an open way (Józefik, 2006). The following characteristics of the functioning of families where a member has been diagnosed with anorexia are: entanglement, overprotectiveness, inflexibility, inability to solve conflicts and involving the child in marital conflict (Weber & Stierlina, 1991 as cited in: Józefik 2006; Selvini-Palazzoli & Viaro, 1988, as cited in: Józefik, 2006). The child becomes involved in conflict, and the (bulimic or anorectic) symptoms they develop

When constructing the empirical definition of the "trauma" variable, Henry Krystal's affect theory (1979) and Krueger's self structure theory (2002) were used as a basis.

In Henry Krystal's affect theory, the traumas experienced in a relationship with a caretaker (i.e., object) in early childhood hinder developing the cognitive appraisal of the person's affective reactions (Krystal, 1979). According to the object-relationship theory, crucial sources for developing the psychopathology of eating disorders in the future are traumatic events, emotional deficits and destructive relationships with significant objects particularly in adolescence, which are later on replicated in a given person's social relationships through internalized destructive patterns of relationships with objects (Glickauf-Hughes & Wells, 1997).

Krystal identifies two types of early-childhood trauma, namely type I (one-time event, related to, e.g., leaving the child unattended or placing its life or health at risk) and type II trauma – in other words, a cumulated impact of chronic traumatic events of, for example, being separated from the caretaker due to their going away or hospitalization, a lack of systematic security of the child, neglect, physical violence, cold or unstable emotional reactions towards the child on the parent's (caretaker's) part, excessive and restrictive control of the child and physical abuse in the form of corporal punishment or sexual abuse. Type II trauma is defined as relational or attachment trauma in the literature (Schier, 2005). The assumptions of Krystal's concept of trauma draw on Max Schur's (Luban-Plozza, Pödlinger, Kröger, & Wasilewski, 1995) and McDougall's (2014) theory of psychosomatic disorders' development. The mentioned theorizations confirm the significance of long-time relational traumas for the development of somatic disorders (including eating disorders). The psychoanalytic theories that explain the development of psychosomatic disorders in terms of distortion of affective states' cognitive appraisal (wherein this distortion is caused by bond deficits) are also drawn on by Peter Fonagy in his mentalization theory. This theory indicates that the occurring distortions of mentalizing states of one's own and others' minds may be a source of personality disorders and eating disorders (Fonagy, 1991; Bateman & Fonagy, 2010; Choi-kain & Gunderson, 2008).

Research findings on the importance of physical and sexual violence in shaping the experience of one's own body can be found in Polish literature. The experience of early-childhood chronic interpersonal trauma is related to disordered body self functions (Sakson-Obada, 2009a, 2009b). Such traumas could be referred to as relational traumas according to Krystal's theory; they frequently involve psychological, physical and sexual violence. This type of trauma is based on a disordered early-childhood relationship with one's caretaker. These traumas also form the basis for developing difficulties with forming bonds and building relationships with other people (Sakson-Obada, 2008, 2009a, 2009b). In the case of sexual trauma (particularly from a close person) its victim frequently develops a so-called "traumatic bond with the aggressor", which is directly linked with disorders in experiencing their own bodies (Skrzypska & Suchańska, 2011; Kubiak & Sakson-Obada, 2016).

Krueger's (2002a, 2002b) contemporary theory of self-structure development and pathology should also be included when explaining the significance of emotional bonds in the process of shaping the psychological portrayal of people with anorexia and bulimia. The basic tenets of the psychological bond in shaping the specifics of body-self structure in Krueger's theorization are congruent with the

understanding of psychopathology of body image disorders that is represented by object-relationship theorists. The specifics of a formed emotional bond serves as a matrix for the image of and the attitude towards one's own body. This is particularly significant for developing the psychopathology of eating disorders, in which the pattern of social relationships is based on difficulties with forming bonds. This may stem from traumas experienced within relationships with other people.

## AIM OF THE STUDY

The aim of this article is to present the results of my own research, concerning mutual relationships between selected psychological traits that are typical for people with eating disorders and these people's experience of traumatic events.

The basic research question was the following: to what degree are the traumatic event experiences of women who suffer from various eating disorders associated with these women's psychological characteristics?

The following specific research questions were formulated:

- is there a relationship between the traumas experienced in subjects' lives and the typical psychological characteristics (perfectionism, bulimic – impulsive tendencies, interoceptive awareness) of women who suffer from bulimia, anorexia and binge-eating disorders (and, if so, what is the nature of this relationship)?
- is there a relationship between the traumas experienced in the subjects' lives and body dissatisfaction in women who suffer from bulimia, anorexia and binge-eating disorders (and, if so, what is the strength of this relationship)?
- is there a relationship between relational traumas experienced in the subjects' lives and fear of maturing in women who suffer from bulimia, anorexia and binge-eating disorders (and, if so, what is the strength of this relationship)?
- is there a relationship between the traumas experienced in the subjects' lives and the pattern of distrust and insecurity in forming interpersonal relationships in women who suffer from bulimia, anorexia and binge-eating disorders (and, if so, what is the strength of this relationship)?

An additional question was posed, namely: Is there a relationship between the frequency of trauma occurrence in the subjects with the medical diagnosis of anorexia, bulimia and binge-eating disorder?

The explanatory variable was defined as relational traumas.

When conceptualizing the empirical definition of the explanatory variable it was assumed that the occurrence of a traumatic event (that is, an extreme-

ly difficult situation connected with a lasting deprivation of the feeling of security) is in itself a factor that influences the psychological functioning of an individual who has experienced such an event. Long-lasting traumas experienced in childhood in relationships with caretakers, parents or other adults are risk factors for developing disordered emotional bonds and, as a result of that, mental disorders in adulthood (Tryjarska, 2010; Józefik, 2008; Schier, 2005). When drawing up the content of the trauma variable, literature sources were used as a basis – for example, Henry Krystal's theory of trauma (1977). The cited literature sources indicated a necessity to include and differentiate two components within this variable, namely:

1. Category I – an episode of at least one traumatic event (accidents, disasters, the presence of various other difficult situations bearing characteristics of a traumatic event, e.g. improper separation from caretaker (mother, father, other close ones) due to hospitalization, caretaker loss (death or lasting absence of one or both parents), lack of systematic satisfaction of the child's need for security provided by their caretaker(s) etc.) has occurred in the subjects' lives.
2. Category II – long-lasting relational traumas, experienced within relationships with another person or group of people (psychological, physical or sexual violence; physically abusing a person through overusing corporal punishments in childhood and adolescence; having experienced various forms of violence as an adult), have been present in the subjects' life history.

The variable of trauma(s) was measured based on data from the interview and psychological conversations with the subjects who were suffering from anorexia, bulimia and binge-eating disorder. The indicators of this variable were explicit mentions of traumatic events having been present in the lives of the subjects with anorexia, bulimia and binge-eating disorder. The main criteria that allowed the explanatory variable to be verified were the following: 1 – the presence of trauma (category I and/or II); 0 – lack of traumatic event experience. The mode of recording and categorizing the category I and II traumatic events was presented along with the description of the research procedure and methods of measuring the variable (i.e., clinical interview, at least three psychological conversations held with each patient separately). The procedure of analyzing the study's results employed statistics fitted for the abovementioned mode of measuring the variable; they allowed statistical analysis of qualitative data. Extensive information on the statistical analysis is provided in the part describing the study results. From a clinical perspective, the diagnosis of chronic trauma versus lack of chronic trauma in one's life history is a sufficient criterion for measuring the explanatory vari-

able, without any necessity to seek additional quantitative indicators of the experienced traumas and their particular form. Defining explicitly the experience of any type of violence or shortcomings with respect to providing an individual with a feeling of security or parental care is sufficient empirical data that allows measuring the explanatory variable, that is, herein, traumas.

The explained variable was a set of selected psychological characteristics that the literature had identified as a basic profile of the psychological traits typical for people with eating disorders. The study involved the following psychological characteristics, verified using D. Garner's Eating Disorders Inventory (EDI) in its Polish version by Żechowski (2008).

1. Body dissatisfaction – a tendency to emotionally and cognitively experience one's own body and external looks in a negative manner ("Body Dissatisfaction" scale).
2. Bulimic (impulsive) tendencies – a variable that describes a tendency towards developing obsessive thoughts and interpretations focused particularly on the topic of eating, binge-eating and need ("readiness") to resort to compensatory behaviors aimed at reducing body weight and removing the consumed food from one's stomach ("Bulimia" scale).
3. Perfectionism – a variable that denotes a psychological characteristic involving a certain level of an individual's striving towards placing the highest emphasis on attaining high goals and the highest standards of personal accomplishments as well as complying with exorbitant norms related to other people's expectations ("Perfectionism" scale).
4. Interoceptive awareness – a variable that denotes a certain level of control over stimuli from one's own body and emotions as well as a level of disorientation with regard to recognizing one's own emotional states and body stimuli. The level of interoceptive awareness deficits is related to impulse control in people with eating disorders ("Interoceptive Awareness" scale).
5. Low self-esteem – a variable labeling the level of perceptions of incompetence, inefficiency and one's low worth ("Ineffectiveness" scale).
6. Distrust and insecurity within interpersonal relationships – a variable describing the level of perceptions of insecurity and distrust within the formed interpersonal relationships ("Interpersonal Distrust" scale). This variable denotes the level of revealed difficulties with expressing thoughts and feelings to other people and difficulties with experiencing others' understanding and love; it also involves feeling alienated and distanced as well as experiencing difficulties with forming emotional bonds with others.
7. Fear of maturing – a variable that denotes a certain level of anxiety and fear of psychosexual matu-

ration, a desire to return to the so-called security of childhood and longing for the motherly care of this period. The mentioned type of fear is identified in the literature as a significant element in developing the psychopathology of eating disorders ("Maturity Fears" scale).

## PARTICIPANTS AND PROCEDURE

### PARTICIPANTS

Subjects were selected based on formal medical diagnosis in accordance with ICD-10, carried out by psychiatrists. The sample was obtained with the adoption of nonprobability sampling. It consisted of the following:

- 30 females aged between 20 and 26 diagnosed with bulimia (ICD-10: F50.2, F50.3;  $n = 30$ , age: 21.30, BMI = 20.63),
- 31 females diagnosed with binge-eating disorder (ICD-10: F50.4;  $n = 32$ , age: 24.10, BMI = 24.03),
- 59 females aged between 20 and 26 diagnosed with anorexia (ICD-10: F50.0, F50.1), including restrictive ( $n = 29$ , age: 21.30, BMI = 16.70) and bulimic anorexia ( $n = 30$ , age: 22.30, BMI = 17.80).

### PROCEDURE

The research was carried out in the years 2007-2012 in outpatient clinics treating neuroses and eating disorders and mental health outpatient clinics in Poland. Apart from participating in a structured clinical interview, each participant also took part in several (at least 3) diagnostic psychological conversations, during which autobiographic data were gathered and testing was conducted. The study has gained approval from the Board of Ethics<sup>1</sup>.

### MEASURES

The study employed a clinical and psychometric approach. The interview and psychological conversations were carried out in order to measure the explanatory variable, i.e. the occurrence(s) of trauma in the participants' lives. The indicators of experienced psychological traumas (i.e., the explanatory variable) were the following data obtained through interviews and psychological conversations:

- one-time traumatizing events of various types (accidents, disasters, difficult situations linked with being left unattended and one's life being at risk in their childhood or adolescence), reported to have occurred in the participants' lives (from childhood to adolescence),
- participation in a one-time traumatic episode (accidents, disasters, various other difficult situations

that bear characteristics of a traumatic event) in the subjects' adult lives,

- reported occurrence of various lasting traumatic events in the subjects' childhood or adolescence (i.e., physical or sexual violence; being separated from caretaker due to, e.g., long-time departure or caretaker's (mother or father's) death; losing a person close to the child or teenager, e.g. their brother or sister; being separated due to hospitalization; situations of a permanent lack of proper care and negligence; emotional coldness in the subjects' relationships; emotional instability towards the subjects; physical abuse through overuse of corporal punishment; or exerting excessive, restrictive control, etc.),
- reported occurrence of psychological, physical or sexual violence in the subjects' adult lives.

The information obtained was considered sensitive data and full confidentiality was provided. The data were included in the study after obtaining personal consent from each participant. These pieces of information were not included in the documentation that was accessible to other members of the medical personnel (apart from the treating doctor and psychologist-psychotherapist). The measurement procedure involved differentiating the frequency of traumatic events' occurrence in accordance with the criterion described in points 1 to 4. It was decided that defining the presence of a certain type of traumatizing stimulus and its duration (the given type of trauma, its one-time versus long-term, repetitive nature) within the subjects' autobiographic descriptions was sufficient data for analyzing the topic area of this study.

A certain facilitation for maintaining plausibility and scientific reliability while gathering information on traumas in participants was the fact that the interviews and psychological conversations were carried out by the patients' treating doctors and psychotherapists (psychologists). Owing to the research duration, it was possible to develop therapeutic rapport, which facilitated obtaining data on traumatic events while complying with the standards of anonymity and patients' consent for using the provided information for scientific purposes.

A selection of structured clinical interview categories and data on disease history were also used to measure: the BMI index, socio-demographic data (age, gender, place of residence, marital status), and the presence of the following ICD-10-based diagnoses: bulimia (F50.2), anorexia nervosa (F50.1) and binge-eating disorder (F50.4).

Measuring the explained variable involved employing the psychometric approach, i.e. the Eating Disorder Inventory (EDI) by Garner (2004; Polish version by Żechowski, 2008). This test was used to measure a selection of psychological traits that, according to research results, are typical for the psy-

chological portrayal of people with eating disorders (Garner, 2004; Izydorczyk, 2014).

Apart from the psychometric criteria, a significant value for attaining the research goal was also developing clinical interpretation criteria for the data. These criteria allowed determination of the intensity of all the researched variables with reference to the following dimension: good versus bad for staying healthy (indicating the variable intensity, defined as the so-called clinical level, i.e., a level abnormal for healthiness).

## RESULTS

The first step in analyzing the results was calculating means for the intensity of selected psychological characteristics in women who suffer from eating disorders, without dividing them into subgroups based on diagnosis (anorexia, bulimia or binge-eating disorder). The second stage was comparing the sample with respect to intensity of the explanatory variable components; at this point, two subcategories were identified within the sample: women with eating disorders who reported the occurrence of traumatic events in their lives and women whose reported histories lacked traumatic events.

The mean values for the verified psychological characteristics were compared between the females with eating disorders (i.e., anorexia, bulimia and binge-eating disorder) who have experienced category I traumatic events and/or chronic relational trauma (defined as category II) and the females who suffer from the same types of eating disorders, but have not experienced the mentioned types of traumatic events (i.e., category I or II) in their lives.

Directions of the statistical analysis were adjusted to the research questions:

- stage I – measuring the mean intensity of the verified psychological characteristics of people with eating disorders (anorexia, bulimia and binge-eating disorder),
- stage II – comparing females with anorexia, bulimia and binge-eating disorder who have experiences category I and II traumatic events in their lives with those who have had no such experience, with regard to the intensity of the verified psychological characteristics in both of the mentioned females' subgroups,
- stage III – characterizing the intensity of the relationship between the medical diagnosis of a given type of eating disorder in the female participants and the frequency of category I and II trauma occurrence in the subjects.

The results of these comparisons are portrayed in Tables 1 and 2. Owing to the fact that distributions of the researched variables did not meet the requirement of normal distribution, the Mann-Whitney non-

Table 1

*Distribution of means for the intensity level of the selected psychological characteristics in women who suffer from eating disorders, with the inclusion of category I traumatic events (N = 120)*

Psychological characteristics	People with no category I traumatic event occurrence	People with category I traumatic event(s) occurrence	<i>U</i>	<i>Z</i>	<i>p</i>
Body dissatisfaction	13.86	16.58	921.50	-1.91	.056
Interoceptive awareness	10.90	11.85	1111.00	-0.70	.481
Fear of maturing	14.88	17.38	1039.00	-1.16	.245
Bulimic (impulsive) tendencies	16.29	17.08	968.50	-1.61	.107
Low self-esteem (a feeling of incompetence, worthlessness)	14.94	15.73	983.00	-1.52	.129
Perfectionism	17.26	18.04	835.00	-2.46	.014
Distrust and insecurity within interpersonal relationships	10.95	8.04	993.00	1.46	.146

Table 2

*Distribution of means for the intensity level of the selected psychological characteristics in women who suffer from eating disorders, with the inclusion of category II traumatic events (N = 120)*

Psychological characteristics	People with no traumatic event occurrence category II	People with traumatic event occurrence category II	<i>U</i>	<i>Z</i>	<i>p</i>
Body dissatisfaction	13.92	16.26	1041.00	-1.35	.179
Interoceptive awareness	10.95	11.67	1138.00	-0.74	.462
Fear of maturing	14.90	17.22	1036.00	-1.38	.169
Bulimic (impulsive) tendencies	16.16	17.48	850.00	-2.55	.014
Low self-esteem (a feeling of incompetence, worthlessness)	15.03	15.37	1218.00	-0.23	.816
Perfectionism	17.33	17.74	1075.50	-1.13	.259
Distrust and insecurity within interpersonal relationships	10.44	9.89	1254.50	0.00	.997

parametric *U* test was calculated in order to analyze the measures being verified.

Comparative mean analysis for the intensity of psychological traits in the two subgroups of women with eating disorders confirmed a significantly higher – and, at the same time, significantly different for both subgroups – intensity of body dissatisfaction and perfectionism in females with category I trauma experience. The results of the statistical analysis indicate that body dissatisfaction is significantly higher among the women with eating disorders who have experienced category I traumatic events (i.e., single episodes of traumatic events excluding relational

traumas in the form of physical, sexual or psychological violence) in their lives (mostly in their childhood and adolescence) than in those with no such experience. In this respect these women differ significantly from the women with anorexia, bulimia or binge-eating disorder who did not report occurrence of type I traumatic events in their lives. The women with eating disorders who reveal a higher level of perfectionism and body dissatisfaction have usually experienced more single traumatic event episodes, such as accidents, disasters or other difficult situations, i.e. long-lasting frustration of the need for security in a subject's childhood on the part of



their caretaker(s), being separated from their mother and/or father or other close ones at too young an age due to frequent hospitalizations followed by a lack of contact with the caretaker or caretaker loss (death or lasting absence of one or both parents) than have the females who suffer from eating disorders but have not had trauma experience. The remainder of the verified psychological characteristics did not significantly differentiate the women from both researched subgroups. The variable describing a pattern of distrust and insecurity in forming interpersonal relationships in the subjects' adult lives showed comparable levels in both subgroups.

Thus, when analyzing the differences between subjects with respect to perfectionism, an issue it may be worth considering is the degree to which its significantly higher intensity in the subgroup with traumatic events' occurrence is linked with applying a restrictive behavior pattern to relationships. A proper dependence (closeness) provides a basis for not resorting to excessive self-control of emotion and behavior as an unconsciously used mechanism for adjusting to situations and the surrounding social world. Strong and excessive self-control, which manifests itself through perfectionism, may be a way in which people with eating disorders (particularly anorexia nervosa) cope with deprived security needs and emotional abandonment. Those feelings always stem from category I traumatic events (i.e., being separated from a caretaker – i.e., mother, father or other close ones – at too young an age, caretaker loss as a result of death or lasting absence of one or both parents due to, e.g., being hospitalized during their child's childhood, or other reasons for long-lasting absence from taking daily care of the child). For this subgroup of women, the presence of relational traumas (i.e., physical or sexual violence, which is strongly linked with crossing basic corporal and psychological boundaries) was not verified. In the category I subgroup, the deprivation of emotional needs and feelings of security was usually linked with experiencing emotional abandonment rather than directly with attacking their bodies with impulsive behaviors, as was typical for category II subjects. The autobiographic data for subjects who have experienced category I traumatic events indicate experiencing emotional deficits and having experienced a state of emotional abandonment in the females' childhood. Herein the caretaker object used to "vanish" rather than "attack the body", as was the case for abuse experience. The women with category I trauma experience revealed emotional bond deficits. The perfectionism and restriction within the disease symptoms may form an unconscious response to the experienced early-childhood deficit of closeness and, at the same time, a lack of influence over this state. Excessive (perfectionist) control may provide the subjects with an ostensible sense of agency

(i.e., influence) over their own actions and daily life. Excessive perfectionism within eating disorders may foster a sense of omnipotence and denying the need for closeness.

The third psychological characteristic that came close to statistical significance in differentiating the two subgroups of females with eating disorders (i.e., I and II) was bulimic (impulsive) tendencies. Thus, future research should examine this variable in order to extend the measurement of the significance of differences between people with different types of eating disorders to a different population. The issue appears salient as bulimic (impulsive) tendencies have achieved the status of a psychological variable that significantly differentiates women with eating disorders and traumatic experience(s) in their lives. The women who suffer from eating disorders and have had experience(s) of relational trauma (i.e., psychological, physical or sexual violence) revealed a higher intensity of bulimic (impulsive) tendencies than did females with no category II trauma experience. At the same time, this psychological variable turned out to differentiate significantly women with relational trauma experience(s) and those with no such experience in their histories. The results relating to this aspect are presented in Table 2.

The statistical analysis of the differences between the researched variables that was carried out using the Mann-Whitney *U* test confirmed the existence of significant differences between the females with eating disorders who have experienced relational trauma(s) in their lives (particularly in their childhood and adolescence) and those who did not report such trauma during the course of this research. The females who suffer from the mentioned disorder type and have experienced psychological, physical or sexual violence (particularly in their childhood) revealed a significantly different, higher level of bulimic thinking and tendencies to exhibit excessively uncontrolled, impulsive behaviors towards food and nutrition (i.e., vomit-provoking and other forms of body purgation, e.g. using purgative drugs and others) than did females with no relational trauma experience. The remaining psychological characteristics achieved a similar, non-distinctive level for both subgroups. Thus, the tendencies towards a bulimic and impulsive pattern of thinking, experiencing and reacting may be higher for the people with eating disorders who have experienced psychological, sexual or physical violence.

The analysis of the described results indicates that having experienced relational trauma(s) is significantly linked with bulimic tendencies and behavior impulsiveness. The intensity of all the remaining psychological characteristics was similar for both subgroups. It may be hypothesized that for women with eating disorders, bulimic tendencies and impulsiveness may be a form of abreacting the "assault to

body boundaries” that took place as a result of the experienced relational trauma (i.e., physical or sexual violence). A question may be posed whether the body of a person who experiences violence is not devalued by the victim herself, according to the victim-aggressor bond pattern. The impulsive bulimic symptoms are autoaggressive behaviors towards the body. It would be worth considering whether a bulimic symptom (vomit-provoking, binge eating) does not present a specific unconscious pattern of identification with the aggressor role on the subjects’ part. Females with bulimic and impulsive tendencies unconsciously disrupt their body boundaries similarly to the way it was done by the aggressor. Hence, it is worth considering whether the impulsive reaction pattern and the bulimic symptom does not reflect the phenomenon of retraumatization.

The statistical analysis of the research results presented in Table confirms high levels of body dissatisfaction in the whole group of females with eating disorders. In spite of that, body dissatisfaction did not reveal statistically significant relationships with relational trauma. One may be dissatisfied with one’s body, yet it does not have to result from having experienced relational trauma. The retraumatization mechanism may be significant for developing impulsiveness – that is, bulimic body assaults (i.e., bulimic cycles). The body dissatisfaction variable itself does not have to constitute a decisive factor that moti-

vates people towards developing bulimic (impulsive) symptoms.

To sum up, apart from the psychological characteristics such as body dissatisfaction, perfectionism and bulimic (impulsive) tendencies, the remaining psychological characteristics, however important for the psychological portrayal of people with eating disorders, did not differentiate significantly these people when the three categories of traumatic experience (I and II traumatic event categories and no such experience) were accounted for.

Finally, in order to fully address the second, additional, research question, the strength of the relationships between the particular eating disorder ICD-10-based diagnosis (anorexia, bulimia or binge-eating disorder) and the occurrence of category I and II trauma was calculated. These data are presented in Tables 3 and 4. Owing to categories of the qualitative variables and their nominal measurement scales, Pearson’s C contingency coefficient was used to measure the strength of relationships between these variables. The C coefficient denotes the strength of a relationship between two variables analyzed in the  $\chi^2$  test.

The data presented in Table 3 and the contingency coefficient values indicate the existence of differences with regard to frequencies of category I traumatic events’ occurrence in women who suffer from anorexia, bulimia and binge-eating disorder. The signif-

Table 3

*Relationships between the medical diagnosis of a certain eating disorder among the female subjects (N = 120) and the frequency of category I trauma occurrence*

ICD-10-based medical diagnosis of eating disorder	People with no traumatic event occurrence (category I)	People with category I traumatic event occurrence	Combined
Binge-eating disorder	29	2	31
%	30.85	7.69	
Bulimia	18	7	25
%	19.15	26.92	
Bulimic anorexia	16	9	25
%	17.02	34.62	
Restrictive anorexia	22	8	30
%	23.40	30.77	
Atypical anorexia and bulimia	9	0	9
%	9.57	0.00	
Combined	94	26	120
	$\chi^2$	<i>df</i>	<i>p</i>
Pearson $\chi^2$	10.78	4	.029
Contingency coefficient	.29		

Table 4

*The relationship between the medical diagnosis of a given type of eating disorder in the female subjects (N = 120) and the frequency of category II traumatic events' occurrence. Pearson  $\chi^2$ , contingency coefficient*

Medical diagnosis	People with no traumatic event occurrence (category II – relational trauma)	People with traumatic event(s) occurrence (category II – relational trauma)	Combined
Binge-eating disorder	26	5	31
%	27.96	18.52	
Bulimia	13	12	25
%	13.98	44.44	
Bulimic anorexia	17	8	25
%	18.28	29.63	
Restrictive anorexia	28	2	30
%	30.11	7.41	
Atypical: bulimia and anorexia	9	0	9
%	9.68	0.00	
Combined	93	27	120
	$\chi^2$	<i>df</i>	<i>p</i>
Pearson $\chi^2$	18.26	4	< .001
Contingency coefficient	.36		

ificance level and the contingency coefficient values indicate significant (moderate) differences for the eating disorder groups.

Females who have been diagnosed with bulimia and bulimic anorexia revealed similar frequency levels for the presence of category I traumatic events in their histories.

The number of females with restrictive anorexia who reported a lack of category I traumatic events was greatly higher than the number of females with restrictive anorexia who reported the occurrence of traumatic events in their lives. Compared with all subjects, the ones with binge-eating disorder reported infinitesimal occurrence of traumatic events in the form of emotional abandonment and so-called forcible separation from significant others (i.e., caretakers, parents) in their childhood and/or adolescence. For atypical anorexia and bulimia no subjects who reported the occurrence of category I trauma were identified. What draws attention is the obtained contingency coefficient's value of .29 ( $p = .029$ ), suggesting the presence of a moderate relationship between the occurrence of category I traumatic events (emotional deficits caused by emotional abandonment and lack of proper parental care) and anorexia nervosa (restrictive and bulimic). For bulimia and binge-eating disorder, no significant relationship was

observed between the frequency of category I traumatic events' occurrence and the presence of these disorders' medical diagnosis in the sample.

The data presented in Table 4 and the contingency coefficient value (.36,  $p < .001$ ) confirm the existence of significant differences with regard to frequencies of category II traumatic events' occurrence in women who suffer from anorexia, bulimia nervosa and binge-eating disorder. Also in the case of relational trauma occurrence frequency in women with different eating disorders diagnosed, the differences' significance level and the contingency coefficient's values indicate moderate, yet significant differences between participants. A significant relationship was revealed between the frequency of trauma in the form of violence and the medical diagnosis of bulimia and bulimic anorexia. Statistical analysis revealed that women with bulimia and bulimic anorexia reported having experienced category II traumatic events – that is, relational trauma (i.e., psychological, physical and/or sexual violence) in their childhood and adolescence significantly more often than did subjects with restrictive anorexia and binge-eating disorder. For subjects with restrictive anorexia, no significant relationship between this diagnosis and category II trauma was observed. Similarly to category I traumatic events (i.e., emotional deficits due to

being separated from caretakers/parents for different reasons), herein also few women with binge-eating disorders reported the presence of relational trauma (i.e., psychological, sexual or physical violence) in their lives. For atypical anorexia and bulimia, no subjects reported having experienced category II traumatic events.

## DISCUSSION

Answering the first and main research question concerning seeking relationships between the psychological characteristics and category I and II trauma in females with eating disorders, it is worth emphasizing the fact that the results of statistical analyses confirmed the existence of a significant relationship only with regard to three psychological characteristics and the traumas reported by the whole group. Only body dissatisfaction and perfectionism revealed relationships with having experienced category I trauma events, i.e. ones connected with the presence of emotional deficits due to a deprived sense of security resulting from emotional abandonment or insufficient parental care in childhood. For category II traumas, described in terms of having experienced violence, only bulimic (impulsive) tendencies demonstrated a significant relationship with the mentioned psychological characteristic. The remaining psychological characteristics did not reveal any significant relationships with the experienced traumas. The theories of attachment presented in the literature sources cited in the introduction of this work and results of numerous authors' research since 2010 indicate the existence of relationships between the experienced traumas (particularly physical and sexual violence) and experiencing the body as well as dissatisfaction with the image of one's own body and the occurrence of bulimic tendencies (Sakson-Obada, 2009a, 2009b; Skrzypska & Suchańska, 2011). A similar relationship concerns perfectionism, which is indicated as a common characteristic of people with anorexia nervosa (Bruch, 1973; Williams, 1997; Garner, 2004).

To sum up the results of this study, it can be asserted that for females with bulimia and bulimic anorexia the declarations of having experienced relational trauma (broadly defined psychological, physical and sexual violence in their childhood and/or adolescence) were significantly more frequent than in females with restrictive anorexia or binge-eating disorder. Females with the mentioned types of eating disorders (i.e., bulimia and bulimic anorexia) have also experienced considerable emotional deficits due to being abandoned by parents or caretakers, predominantly in their childhood. Females with restrictive anorexia did not declare having experienced relational trauma. However, they did report, with a higher frequency, the presence of emotional deficits, feeling insecure

and the presence of emotional or actual abandonment situations in their childhood/adolescence.

How should this phenomenon be understood? What might be the cause of the higher frequency of reporting traumatic events (particularly relational traumas) for females with bulimia than was the case for females with anorexia (particularly restrictive)?

Many factors can be included when attempting to explain the mentioned results.

Firstly, they may be due to the limitations of sample selection criteria: only females with anorexia nervosa at a certain stage of treatment and of a certain psychophysical state were qualified for the study. The BMI for females with restrictive anorexia indicated that it was possible to treat them in outpatient settings. These females represented a higher level of psychological mechanisms' maturity and ability to maintain weight, which indicated that outpatient treatment could be taken up. For females with bulimia, outpatient treatment is used more frequently owing to their BMI usually being above the level of body emaciation. Other indices of medical body emaciation can be controlled while treating bulimia in outpatient settings. Thus, the possibility to measure the variables (i.e., traumatic events' occurrence) was higher for patients with bulimia than it was for those with anorexia nervosa.

Secondly, the sample may have lacked people who had been diagnosed with anorexia nervosa and, at the same time, strongly emaciated their bodies due to having experienced psychological traumas of the so-called preverbal period.

As is indicated by theorists of the psychoanalytic paradigm, the genesis of anorexia nervosa frequently involves early-childhood (preverbal) psychological trauma experience that is associated with broadly defined emotional abandonment on the part of the mother – i.e., the caring object (Bruch, 1973; Williams, 1997). The psychological mechanisms where perfectionism and high restriction prevail stem from a specific emotional and cognitive “system of closure” for receiving and experiencing stimuli from the world. This system is formed as a result of having experienced preverbal traumas in infancy. A pattern of rejection and emotional coldness on the mother's (caretaker's) part towards the infant fosters the development of the early-childhood system of psychological mechanisms that construct the “closure” for emotionally experiencing and receiving all stimuli. Williams has labeled this as “no entry system”. Body emaciation and symptoms of restriction in anorexia could be linked with the described psychological background. Such patients require longer-lasting psychological diagnosis and therapeutic contact in order to recognize the occurrence of early-childhood (unconscious), preverbal traumas within the relationship with the motherly object. It appears that females with such history may not have fallen into the sample re-

searched in this study. Perhaps the females with restrictive anorexia who have experienced this type of trauma may be found among those with a low BMI and high body emaciation. Owing to this, those females are hardly ever involved in outpatient treatment. Moreover, their level of body emaciation would preclude becoming study subjects for ethical reasons.

To sum up the results of this study, it is worth pointing out a certain similarity between the results obtained herein and those of other authors that were mentioned earlier in this work. This similarity mostly concerns the results that confirm frequent occurrence of relational trauma (psychological, physical and sexual violence) in people with bulimia and with symptoms of bulimic anorexia (Kent, Waller, & Dagnan, 1999; Kent & Waller, 2000; Hartt & Waller, 2002). Another vital contemporary report on impulsiveness in bulimia and the presence of psychological trauma is provided in the works of Keel, Mitchell, Davis, and Crow (2001) and Keel, Gravener, Joiner, and Haedt (2010). The topics of relational trauma, violence and traumatic events (emotional abandonment, long-lasting childhood deprivation of the need for security on the parents/caretakers' part) are present in foreign research works carried out in samples of people with eating disorders (Franzoni et al., 2013; Tasca et al., 2013; Collins et al., 2014; Litwack et al., 2014; McCormack et al., 2014; Hewett & Loma, 2015; Racine & Wildes, 2015; Madowitz et al., 2015; Moulton et al., 2015; Tahilani, 2015; Caslini et al., 2016). In Poland, however, the topic of trauma in eating disorders is poorly explored and research results appear rarely. I attempted to initially explore the mentioned issue within the work "*Postawy i zachowania wobec własnego ciała w zaburzeniach odżywiania*" ("Attitudes and behaviors towards one's own body within eating disorders", Izdorczyk, 2014). However, the nature and aims of the issues raised there were not focused on the meaning of trauma for developing eating disorders' symptomatology mechanisms. The issue of traumatic events' experience frequency in the histories of people with eating disorders is explored in the course of psychotherapeutic processes rather than in research works. Nevertheless, diagnosing this fact is vital for planning the course of psychotherapy and treatment for people with eating disorders.

## CONCLUSIONS

Based on the obtained results and statistical analysis thereof, the research questions were answered, and the following main conclusions were drawn.

No confirmation was obtained for the existence of significant relationships between the psychological characteristics typical for people with eating disorders (anorexia, bulimia, binge-eating disorder) and their experience of psychological trauma, except for the follow-

ing characteristics: bulimic tendencies, perfectionism and body dissatisfaction. For these, the relationships with the occurrence of traumas in the lives of females with eating disorders were found to be significant.

The results confirmed a significantly higher frequency of relational trauma occurrence, i.e. violence (category II), in females with bulimic tendencies (i.e., with bulimia and bulimic anorexia) than in ones with restrictive anorexia and binge-eating disorder. For restrictive anorexia and females with binge-eating disorders, no significant relationship was observed between the frequency of violence-type trauma and the diagnosis of these disorders.

Perfectionism and body dissatisfaction in people with eating disorders demonstrated a significant relationship with the females who have experienced category I traumatic events, i.e. in the form of various situations of emotional abandonment by a parent (caretaker) in childhood and adolescence.

The significance of traumatic events, particularly relational trauma, for eating disorders should be considered as a vital indicator for the diagnosis and psychotherapy for this group of patients. Even though the relationship between trauma experience and developing symptoms of bulimia and anorexia is not simple, and several mediating variables come into play (e.g., alexithymia, dissociation or borderline personality disorder), accommodating the role of trauma in diagnosing and treating patients is worth considering and further exploring in an empiric manner.

## LIMITATIONS

Even though the study provided answers to the posed research questions, it possesses certain limitations. This should be taken into consideration when planning future explorations of this topic. Firstly, the limitations concern the number of subjects, which should be increased in order to obtain more reliable results. The topic of this study is difficult to verify empirically as it involves so-called sensitive data. Hence, it is impossible to explore it by adopting a psychometric approach – a clinical approach should be adopted instead. In future research, it would be advisable to extend the sample and introduce other research methods aimed at verifying specifics of the experienced trauma, including, for example, measures of alexithymia, dissociation or personality structure.

## ENDNOTE

- 1 The approval for the study in which information necessary for publication was obtained was issued in 2008-2012 by the Ethics Committee of the Faculty of Pedagogy and Psychology of the University of Silesia in Katowice.

## REFERENCES

- Bateman, A. W., & Fonagy, P. (2010). Mentalization-based treatment for borderline personality disorder. *World Psychiatry*, 9, 11–15.
- Bowlby, J. (1982). Attachment and loss: retrospect and prospect. *American Journal of Orthopsychiatry*, 52, 664–678.
- Bowlby, J. A. (1988). *Secure base*. New York: Basic Books
- Bruch, H. (1973). *Eating disorders: Obesity, anorexia nervosa and the person within*. New York: Basic Books.
- Bulik, C. M., Tozzi, F., Anderson, C., Mazzeo, S. E., Aggen, S., & Sullivan, P. F. (2003). The relation between eating disorders and components of perfectionism. *American Journal Psychiatry*, 160, 366–368.
- Button, E., & Aldridge, S. (2007). Season of birth and eating disorders: patterns across diagnoses in a specialized eating disorders service. *International Journal of Eating Disorders*, 40, 468–471.
- Caslini, M., Bartoli, F., Crocamo, C., Dakanalis, A., Clerici, M., & Carrà, G. (2016). Disentangling the association between child abuse and eating disorders: A systematic review and meta-analysis. *Psychosomatic Medicine*, 78, 79–90.
- Choi-kain, L. W., & Gunderson, J. G. (2008). Mentalization: ontogeny, assessment, and application in the treatment of borderline personality disorder. *American Journal of Psychiatry*, 165, 1127–1135.
- Clarkin, J. F., Fonagy, P., & Gabbard, G. (2013). *Psychoterapia psychodynamiczna zaburzeń osobowości* [Psychodynamic psychotherapy of personality disorders]. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Cloninger, C. R., Svarkic, D. M., & Przybeck, T. R. (1993). Psychobiological model of temperament and character. *Archives of General Psychiatry*, 14, 213–218.
- Collins, B., Fischer, S., Stojek, M., & Becker, K. (2014). The relationship of thought suppression and recent rape to disordered eating in emerging adulthood. *Journal of Adolescence*, 37, 113–121.
- Fassino, S., Abbate-Daga, G., Amianto, F., Leombruni, P., Boggio, S., & Rovera, G. G. (2002). Temperament and character profile of eating disorders: a controlled study with the Temperament and Character Inventory. *International Journal Eating Disorder*, 32, 412–425. doi: 10.1002/eat.10099
- Fonagy, P. (1991). Thinking about thinking: some clinical and theoretical considerations in the treatment of a borderline patient. *International Journal of Psycho-Analysis*, 72, 639–656.
- Franzoni, E., Gualandi, S., Caretti, V., Schimmenti, A., Di Pietro, E., Pellegrini, ...Pellicciari, A. (2013). The relationship between alexithymia, shame, trauma, and body image disorders: Investigation over a large clinical sample. *Neuropsychiatric Dis-*
- ease and Treatment*, 9, 185–193. doi: <https://doi.org/10.2147/NDT.S34822>
- Gabbard, G. O. (2009). *Psychiatria psychodynamiczna w praktyce klinicznej* [Psychodynamic psychiatry in clinical practice]. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Garner, D. EDI-3. (2004). *Eating disorders inventory-3*. Psychological Assessment Resources Inc. USA.
- Glickauf-Hughes, Ch., & Wells, M. (1997). *Object relations psychotherapy. An individual and integrative approach to diagnosis and treatment*. Jason Aronson, Inc., USA.
- Grilo, C. M., & Masheb, R. M. (2002). Childhood maltreatment and personality disorders in adult patients with binge eating disorder. *Acta Psychiatrica Scandinavica*, 106, 183–188.
- Grilo, C. M., Sanislow, C. A., Skodol, A. E., Gunderson, J. G., Sout, R. L., Sea, M. T., ...McGlashan, T. H. (2003). Do eating disorders co-occur with personality disorders? Comparison groups matter. *International Journal Eating Disorders*, 33, 155–164. doi: 10.1002/eat.10123
- Greeno, C., Wing, R., & Shiffman, S. (2000). Binge antecedents in obese women with and without binge eating disorder *Journal of Consulting and Clinical Psychology*, 68, 95–102.
- Hartt, J., & Waller, G. (2002). Child abuse, dissociation and core beliefs in bulimic disorders. *Child Abuse & Neglect*, 26, 923–938.
- Hewett, J., & Loma, L. U. (2015). *The impact of trauma and attachment on eating disorder symptomology*. Dissertation Abstracts International: Section B: The Sciences and Engineering, 76(3-B)(E).
- Herzog, D. B., & Keller, M. B. (1992). The prevalence of personality disorders in 210 women with eating disorders. *Journal Clinical Psychiatry*, 53, 147–152.
- Izydorczyk, B. (2014). *Postawy i zachowania wobec własnego ciała w zaburzeniach odżywiania* [Attitudes and behaviors towards one's own body within eating disorders]. Warsaw: Wydawnictwo Naukowe PWN.
- Izydorczyk, B. (2013a). A psychological diagnosis of the structure of the body self in a group. *Archives of Psychiatry and Psychotherapy*, 2, 21–306.
- Izydorczyk, B. (2013b). Selected psychological traits and body image characteristics in females suffering from binge eating disorder. *Archives of Psychiatry and Psychotherapy*, 1, 19–33.
- Izydorczyk, B. (2011). A psychological profile of the bodily self characteristics in women suffering from bulimia nervosa. In P. Hay (ed.), *New insights into the prevention and treatment of bulimia nervosa* (pp. 147–167). Croatia: Intech Open Access Publisher.
- Jakubczyk, A., Żechowski, C., & Namysłowska, I. (2003). *Jadłowstręt psychiczny – różne postacie, różne terapie* [Anorexia nervosa – various forms, various therapies]. In J. Bomba & B. Józefik (eds.),

- Leczenie anoreksji i bulimii psychicznej: co, kiedy, komu* [Treating anorexia and bulimia nervosa: What, when and to whom] (pp. 47–55). Kraków: Biblioteka Psychiatrii Polskiej, Wydawnictwo Uniwersytetu Jagiellońskiego.
- Józefik, B. (2006). *Relacje rodzinne w anoreksji i bulimii psychicznej* [Family relationships in anorexia and bulimia nervosa]. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Józefik, B. (2008). Koncepcja przywiązania a zaburzenia odżywiania – teoria i empiria [Attachment theory and eating disorders – theoretical and empirical issues]. *Psychiatria Polska*, XLII, 157–166.
- Józefik, B., Iniewicz, G., & Ulańska, R. (2010). Wzory przywiązania, samoocena i płeć psychologiczna w anoreksji i bulimii psychicznej [Attachment patterns, self-esteem, gender schema in anorexia and bulimia nervosa]. *Psychiatria Polska*, XLIV, 665–676.
- Keel, P. K., Gravener, J. A., Joiner, T. E., & Haedt, A. A. (2010). Twenty-year follow-up of bulimia nervosa and related eating disorders not otherwise specified. *International Journal Eating Disorders*, 43, 492–497.
- Keel, P. K., Mitchell, J. E., Davis, T. L., & Crow, S. J. (2001). Relationship between depression and body dissatisfaction in women diagnosed with bulimia nervosa. *International Journal Eating Disorders*, 30, 48–56.
- Kent, A., Waller, G., & Dagnan, D. A. (1999). A greater role of emotional than physical or sexual abuse in predicting disordered eating attitudes: The role of mediating variables. *International Journal of Eating Disorders*, 25, 159–167.
- Kent, A., & Waller, G. (2000). Childhood emotional abuse and eating psychopathology. *Clinical Psychology Review*, 20, 887–903.
- Klatkiewicz, A. (2011). Traumatyczne zdarzenia w dzieciństwie a rozwój zaburzeń osobowości borderline [Traumatic events in childhood and the development of borderline personality disorders]. *Nowiny Lekarskie*, 80, 484–492.
- Krueger, D. W. (2000). Psychodynamic perspective on body image. In T. F. Cash & T. Pruzinsky (eds.), *Body Image. A Handbook of Theory, Research, and Clinical Practice* (pp. 30–37). New York, London: The Guilford Press.
- Krueger, D. W. (2002). *Integrating Body Self and Psychological Self. Creating a New Story in Psychoanalysis and Psychotherapy*. New York–London: Bruner-Routledge.
- Kubiak, A., & Sakson-Obada, O. (2016). Nawykowe samouszkodzenia a Ja cielesne [Repetitive self-injury and the body self]. *Psychiatria Polska*, 50, 43–54. doi: <http://dx.doi.org/10.12740/PP/44453>
- Krystal, H. (1979). Alexithymia and psychotherapy. *American Journal of Psychotherapy*, 33, 17–31.
- Lilenfeld, L. R., Kaye, W. H., Greeno, C. G., Merikangas, K. R., Plotnicov, K., Pollice, C., ...Nagy, L. (1998). A controlled family study of anorexia nervosa and bulimia nervosa: psychiatric disorders in first-degree relatives and effects of proband comorbidity. *Archives of General Psychiatry*, 55, 603–610.
- Litwack, S. D., Mitchell, K. R., Sloan, D. M., Reardon, A. F., & Miller, M. W. (2014). Eating disorder symptoms and comorbid psychopathology among male and female veterans. *General Hospital Psychiatry*, 36, 406–410.
- Luban-Plozza, B., Pöldinger, W., Kröger, F., & Wasilewski, B. (1995). *Zaburzenia psychosomatyczne w praktyce lekarskiej* [Psychosomatic disorders in medical practice]. Warsaw: PZWL.
- Madowitz, J., Matheson, B. E., & Liang, J. (2015). The relationship between eating disorders and sexual trauma. *Eating and Weight Disorders*, 20, 281–293.
- McCormack, L., Lewis, V., & Wells, J. R. (2014). Early life loss and trauma: Eating disorder onset in a middle-aged male – a case study. *American Journal of Men's Health*, 8, 121–136.
- McDougall, J. (2014). *Teatr ciała. Psychoanalityczne podejście do chorób psychosomatycznych* [Theaters of the body: a psychoanalytic approach to psychosomatic illness]. Warsaw: Oficyna Inge-nium.
- Mikołajczyk, E., & Samochowiec, J. (2004a). Cechy psychologiczne pacjentek z zaburzeniami odżywiania w porównaniu ze studentkami wyższych szkół medycznych badanych kwestionariuszem EDI [Psychological characteristics of patients with eating disorders in comparison with students of medical high school who were tested with the EDI questionnaire]. *Psychiatria Polska*, 38, 170–171.
- Mikołajczyk, E., & Samochowiec, J. (2004b). Cechy osobowości u pacjentek z zaburzeniami odżywiania [Personality traits in patients with eating disorders]. *Psychiatria*, 1, 91–95, 147–167.
- Moulton, S. J., Newman, E., Power, K., Swanson, V., & Day, K. (2015). Childhood trauma and eating psychopathology: A mediating role for dissociation and emotion dysregulation? *Child Abuse & Neglect*, 39, 167–174.
- Pinheiro, A. P., Raney, T. J., Thornton, L. M., Fichter, M. M., Berrettini, W. H., Goldman, D., Halmi, K. A., Kaplan, A. S., Strober, M., Treasure, J., Woodside, D. B., Kaye, W. H., & Bulik, C. M. (2010). Sexual functioning in women with eating disorders. *International Journal of Eating Disorders*, 43, 123–129.
- Racine, S. E., & Wildes, J. E. (2015). Emotion dysregulation and anorexia nervosa: An exploration of the role of childhood abuse. *International Journal of Eating Disorders*, 48, 55–58.
- Ranson, K. M., Welzin, T. E., Rao, R., & Matsunaga, H. (1999). Obsessive-compulsive disorder symp-

- toms before and after recovery from bulimia nervosa. *American Journal Psychiatry*, 156, 1703–1708.
- Sakson-Obada, O. (2009a). *Pamięć ciała. Ja cielesne w relacji przywiązania i w traumie* [The memory of the body. I am a corporal in the relationship of attachment and trauma]. Warsaw: Wydawnictwo Difin.
- Sakson-Obada, O. (2009b). Trauma jako czynnik ryzyka dla zaburzeń Ja cielesnego [Trauma as a risk factor for the disorders of the bodily ego]. *Przegląd Psychologiczny*, 52, 309–326.
- Sakson-Obada, O. (2008). Rozwój Ja cielesnego w kontekście wczesnej relacji z opiekunem [Development of the body ego in the context of the early relationship with a caregiver]. *Roczniki Psychologiczne*, 11, 27–44.
- Schier, K. (2005). *Bez tchu i bez słowa. Więź psychiczna i regulacja emocji u osób chorych na astmę oskrzelową* [Breathless and without a word. Psychological and emotional control in patients with bronchial asthma]. Gdańsk: GWP.
- Skrzypska, N., & Suchańska, A. (2011). Uraz seksualny jako czynnik ryzyka zaburzeń doświadczania własnej cielesności [Sexual trauma as a risk factor for dysfunction of experiencing one's own body]. *Seksuologia Polska*, 9, 51–56.
- Striegel-Moore, R. H., Fairburn, C. G., Wilfley, D. E., Pike, K. M., Dohm, F. A., & Kraemer, H. C. (2005). Toward an Understanding of risk factors for binge-eating disorder in black and white women: a community base case-control study. *Psychological Medicine*, 35, 907–917.
- Strober, M. (1981). The relation of personality characteristics to body image disturbances in juvenile anorexia nervosa: A multivariate analysis. *Psychosomatic Medicine*, 43, 323–330.
- Tahilani, K. (2015). *Impact of self-efficacy and emotion dysregulation as mediators between trauma history and disordered eating*. Dissertation Abstracts International: Section B: The Sciences and Engineering, Vol. 75 (11-B)(E).
- Tasca, G., Ritchie, K., Zachariades, F., Trinneer, A., Balfour, L., Demidenko, N., ...Bissada, H. (2013). Attachment insecurity mediates the relationship between childhood trauma and eating disorder psychopathology in a clinical sample: A structural equation model. *Child Abuse & Neglect*, 37, 926–933.
- Tryjarska, B. (2010). *Bliskość w rodzinie. Więzy w dzieciństwie a zaburzenia w dorosłości* [Closeness in a family. Bonds in childhood and disorders in adulthood]. Warsaw: Wydawnictwo Naukowe Scholar.
- Wardle, J., Waller, J., & Rapoport, L. (2001). Body dissatisfaction and binge eating in obese women: the role of restraint and depression. *Obesity Research*, 9, 778–787.
- Williams, G. (1997). *Internal land and scapes foreign bodies. Eating disorders and other pathologies*. London, Karnac: Cerald Duckworth & Co. Ltd. (Books) Ltd 6.
- Żechowski, C. (2008). Polska wersja Kwestionariusza Zaburzeń Odżywiania (EDI) – adaptacja i normalizacja [Polish Version of Eating Disorder Inventory – adaptation and normalization]. *Psychiatria Polska*, 2, 179–193.